CLAIMS

1. A sensor (1), in particular a biosensor, comprising:

- an electrically or electronically insulating support (2), comprising at least one useful face (20),
- a multiplicity of electrically or electronically conducting electrodes (31, 32) that are placed on the useful face (2a) of the support in any predetermined operating arrangement, and are exposed in the sense that said electrodes may be brought together into contact with one and the same external medium, for example liquid,
- a multiplicity of electrical terminals (4), corresponding to said electrodes (31) respectively, which are placed on a useful face (2a or 2b) of the support (2) and are exposed in the sense that said terminals may be electrically or electronically connected to the outside independently of one another,
- a multiplicity of electrically or electronically conducting tracks (5), each running along one (2a) of the faces of the support (2) and/or the other (2b), connecting the multiplicity of electrodes (31 and 32) to the multiplicity of terminals (4) respectively, and
- a layer (6) of an electrically or electronically insulating material, coating one (2a) face of the support (2) and/or the other (2b), on the one hand at least partly covering said tracks (5) and on the other hand exposing both the electrodes (31, 32) and the terminals (5), characterized in that, in combination, on the one hand the multiplicity of electrodes (4) is placed in an extreme zone (1a) on the opposite side from another extreme zone in which the electrical terminals (5) are grouped together, and on the other hand the support (2) includes at least one flexible zone (1c) located between the two extreme zones.

2. The sensor as claimed in claim 1, characterized in that the entire support is flexible.

3. The sensor as claimed in claim 1, characterized in that the flexible zone can bend about at least one axis having a direction perpendicular to the direction of alignment of the operating arrangement of the electrodes (31, 32) and of the group of electrical terminals (5).

4. The sensor as claimed in claim 1, characterized in that the support (2) is a flexible sheet made of insulating material.

5. The sensor as claimed in claim 1, characterized in that each electrode has at least two adjacent ends (31, 32) connected together.

6. The sensor as claimed in claim 1, characterized in that at least one other electrically or electronically conducting track (7) runs along one (2a) of the faces of the support and/or along the other (2b), between another electrical terminal (8) placed on a useful face (2b) of the support, which terminal is exposed in order to be connected to a reference potential, and an end (8a) covered with a layer (9) of the electrically or electronically insulating material.

7. The sensor as claimed in claim 6, characterized in that said other conducting track (7) is assigned to the shielding of the arrangement of the electrodes (31, 32).

8. The sensor as claimed in claim 6, characterized in that two other electrically or electronically conducting tracks (7, 10) run between two other electrical terminals (8, 11) in order to be connected to a reference potential, these being placed on one face (2a) of the support (2) and the other (2b)

respectively, and two respective ends (8a, 10a) that are each covered with the electrically or electronically insulating material.

9. The sensor as claimed in claim 1, characterized in that at least one electrical terminal (4) is placed on the other face (2b) of the support, which is also a useful face, and the track (5) that corresponds to it passes through the thickness of the support (2).

10. A biosensor as claimed in claim 1, of the biochip type, characterized in that a plurality of ligands are each multiply attached to respectively different electrodes (31, 32).